

Hydrologic Model Manager

Short Name	URGWOM
Long Name	Upper Rio Grande Water Operations Model
Description	A daily timestep river and reservoir accounting and forecasting model running in RiverWare software (developed by CADSWES at the University of Colorado). Boundaries are Rio Grande at Colorado/NM border and San Juan-Chama Diversions with the Rio Chama tributary, down to American Dam in El Paso. Includes general physical modeling of reservoirs with elevation-area-capacity relations, outlet works characteristics, precip, evap, and seep methods. Also includes physical river modeling with routing/gain/loss, diversions, returns, wastewater, groundwater interaction, etc. Has multi-contractor accounting, and operational rules to Elephant Butte Reservoir, and flood control rules downstream from there.
Model Type	Generally applicable model, surface water modeling, reservoir operations, canal operations, planning studies, site specific model.
Model Objectives	
Agency Office	URGWOM, US Army Corps of Engineers, Albuquerque District, 4101 Jefferson Plaza NE, Albuquerque, NM 87109
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Model Structure	
Interception	
Groundwater	
Snowmelt	
Precipitation	
Evapo-transpiration	
Infiltration	
Model Paramters	
Spatial Scale	Basinwide, bounded as stated above, plus the transmountain San Juan-Chama Diversions
Temporal Scale	Daily Timestep
Input Requirements	Requires daily accounting and/or operations data at 8 reservoirs, diversions, returns, wastewater, groundwater levels, runoff forecast volumes, historic year inflow hydrographs, weather data, in some places intended reservoir outflows, and more. Data is stored in HEC-DSS.
Computer Requirements	Sun Unix System, RiverWare, HEC-DSS, Data Management Interfaces between them
Model Output	Reservoir daily outflows and storages, streamflows, accounting reports, planning data.
Parameter Estimatr Model Calibrtn	
Model Testing Verification	
Model Sensitivity	
Model Reliability	Moderate performance.

Model Application	
Documentation	Decent documentation available.
Other Comments	<p>Strengths: Unique, detailed accounting in a complex and expansive system.</p> <p>Weaknesses: Lacking sufficient data to accurately model daily gains and losses particularly in the Middle Valley area from Cochiti Lake to Elephant Butte Reservoir.</p> <p>Skills required: Unix. HEC-DSS (dssutl and dsplay utilities)</p> <p>Training: CADSWES provides classes on RiverWare.</p>
Date of Submission	5/24/2000 3:17:23 PM
Developer	
Technical Contact	
Contact Organization	